

Work Order ID 134743

Monday, July 20, 2015

Page 1

Item ID: Revision ID:
Item Name:
Draw Nbr: Start Date: 7/17/2015 11: Start Qty: 1.0000
Revision Nbr: Required Date: 7/24/2015 Reqd Qty: 1.0000
Reference: ECN 15-604 Cust Item ID: Customer ID:
Description: UPDATE PAPERWORK PER ECN 15-604 : RELEASE DGCA INDIA STC FOR ALL D119-646 -XXX Sales Order:

Approvals: Process Plan: MF Date: 15-7-20 Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence	Work Center	Operation	Hours	Set Up	Run	Tool ID	Tool #	Plan	Accept	Reject	Reject	Insp.
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DAS
6
9-89



AUG 28 2015

MF
15-8-24

QC 21 - 15/6/1 

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
Root Cause		FAULT CATEGORY							
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong				
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions				
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance				
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect				
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing				
Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved				
Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing				
Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Misabeled	☐ Finish				
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread				
Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence				
Past Expiry Date ☐	☐ Manufacturing Process	OTHER :							
Misidentified ☐	☐ Past Due								

List Lots

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Criteria : Item ID: 'D119-646-041', 'D119-646-114', 'D119-646-143', 'D119-646-211', 'D119-646-212', 'D119-646-213', 'D119-646-214', 'D119-646-241', 'D119-646-243', 'D119-646-243RevB', 'D119-646-251', 'D119-646-311', 'D119-646-451', 'D119-646-452' All Locations Warehouse Main Warehouse All Quantity

Item ID Item Name	Warehouse ID Location ID	Lot Number	Last Trans Date	Lot Qty	Shelf Life Dt	Lot Code	Type Code	Comments
D119-646-211 Skidtube LH with Run-on Landing Wearplates	Main Warehouse FG084	117257	6/8/2015	1.0000	✓	QC21	chg004	
	Main Warehouse FG084	117258	6/8/2015	1.0000	✓	QC21	CHG004	
	Main Warehouse FG084	129041	6/4/2015	1.0000	✓	QC21	CHG004	
	Main Warehouse FG084	133010	6/4/2015	1.0000	✓	QC21	CHG004	
	Main Warehouse FG084	133011	6/4/2015	1.0000	✓	QC21	CHG004	
Total:				5.0000				
D119-646-212 Skidtube RH with Run-on Landing Wearplates	Main Warehouse FG084	124435	6/16/2015	1.0000	✓	QC21	CHG004	
	Main Warehouse FG084	129042	6/16/2015	1.0000	✓	QC21	CHG004	
	Main Warehouse FG084	129043	6/16/2015	1.0000	✓	QC21	CHG004	
	Main Warehouse FG084	129044	6/16/2015	1.0000	✓	QC21	CHG004	
	Main Warehouse FG084	129045	6/16/2015	1.0000	✓	QC21	CHG004	
Total:				5.0000				
D119-646-213 Skidtube LH with Run-on Landing Wearplates, DART(Apical) Tri-Bag Float Comp.	Main Warehouse FG 073	112714	6/17/2015	1.0000		QC21	CHG005	

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DAS
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9-89

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WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order update only ☐

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Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

List Lots

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Criteria : Item ID: 'D119-646-041', 'D119-646-114', 'D119-646-143', 'D119-646-211', 'D119-646-212', 'D119-646-213', 'D119-646-214', 'D119-646-241', 'D119-646-243', 'D119-646-243RevB', 'D119-646-251', 'D119-646-311', 'D119-646-451', 'D119-646-452' All Locations Warehouse Main Warehouse All Quantity

Item ID Item Name	Warehouse ID Location ID	Lot Number	Last Trans Date	Lot Qty	Shelf Life Dt	Type Code	Comments
Total:				1.0000			
D119-646-214 Skidtube RH with Run-on Landing Wearplates, DART (Apical) Tri-Bag Float Comp.	Main Warehouse FG 083	112715	6/17/2015	1.0000	QC21	CHG005	
Total:				1.0000			
D119-646-241 Replacement Skidtube with Run-on Landing Wearplates, Fits LH or RH	Main Warehouse FG084	118472 ✓	6/23/2015	1.0000	QC21	CHG003	
	Main Warehouse FG084	118477 ✓	6/23/2015	1.0000	QC21	CHG003	
	Main Warehouse FG084	118478 ✓	6/23/2015	1.0000	QC21	CHG003	
	Main Warehouse FG084	118479 ✓	6/23/2015	1.0000	QC21	CHG003	
Total:				4.0000			
D119-646-251 Run-on Landing Wearplate, Fits LH or RH	Main Warehouse FG128b	118389 ✓	12/19/2014	2.0000	QC21	CHG002	
Total:				2.0000			
D119-646-311 Ground Handling	Main Warehouse PK013	130012 ✓	6/12/2015	4.0000	QC21	CHG001	
	Main Warehouse PK013	130013 ✓	6/12/2015	2.0000	QC21	CHG001	
Total:				6.0000			

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Date :		Step #:		QTY Effective :			MRB (QS1042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐			
Design ☐	☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐			
Doc/Data ☐	☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐			
Equip/Tooling ☐	☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐			
Handling/Pre ☐	☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐			
Material ☐	☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐			
Internal Transport ☐	☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐			
Tribal Knowledge ☐	☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐			
LOA ☐	☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐			
Substation ☐	☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐			
Past Expiry Date ☐	☐	Manufacturing Process ☐	OTHER :						
Misidentified ☐	☐	Past Due ☐							

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Item ID Item Name	Warehouse ID Location ID	Lot Number	Last Trans Date	Lot Qty	Shelf Life Dt	Lot Code	Type Code	Comments
D119-646-451 OEM Replacement Wearplate & Wearpad LH	Main Warehouse FG034	62539 ✓	6/30/2014	1.0000		QC21	CHG001	
			Total:	1.0000				
D119-646-452 OEM Replacement Wearplate & Wearpad RH	Main Warehouse FG034	62540 ✓	6/30/2014	1.0000		QC21	CHG001	
			Total:	1.0000				

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Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐							
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval				
Description Work Order Deviation				Disposition				Completed By			
Root Cause				FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐		No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐		Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐		Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	
OTHER : 											

ENGINEERING CHANGE NOTICE
DART AEROSPACE LTD

Date:	15.07.16	Job No.:		ADR Yes/No:	N	ADR Date:		ECN #:	15- 604
Product No.:	D119-646	Created By:	KJ	Approved By:	A.P.				
Product Name:	Skidtubes	Checked By:	ASS						

Distribution	Reqd	Resp	Initial / Date (YY/MM/DD)	Distribution	Reqd	Resp	Initial / Date (YY/MM/DD)
Director of Operations	Y	NF		DQA / QA Coord.	Y	PS/ED	
Production Manager / Coord.	Y	MP/MF		QC Coordinator	Y	PD	
Purchasing Coord.	N	LL/CL		Customer Support	Y	SW/LM	
Production Engineering Coord.	N	DD/JLM		Customer Technical Support	Y	MB/HS	
Production Engineering Coord.	N	DL		Marketing	Y	KO/SL	
Customer Order Processing	N	SL/BG		Sales Support Manager	Y	CP	

Reason for Change:

New India STC

Documents Affected:

Release DGCA India STC: 07-09/2011-AED dated 15.07.16

IF APPLICABLE: NCR: _____ PAR: _____ CAR: _____ CIR: _____ URF: _____

PAPERWORK UPDATE



PARTS MUST COMPLY



PREVIOUS PARTS SATISFACTORY



#	Quality Assurance Actions	Reqd	Resp	Notes	Complete
1	Notify Previous Customers	N			
2	Notify Eurocopter France	N			
3	Notify Augusta Westland	N			
4	Manufacturing Licensing Agreement Update	N			

#	Engineering Actions	Reqd	Resp	Notes	Complete
5	Required Documents/Drawings/Item ID's Under Review (URF)	N			
6	Update Master Document List (MDL)	N			
7	Update Document Record (DR)	N			
8	Update Product Compatibility Matrix	N			
9	Notify TC / FAA of Change (eg. ICA, 8110-3)	N			
10					

#	Document Control Actions	Reqd	Resp	Notes	Complete
11	Move / Update Electronic Files / Design Journal	N			
12	Update Product Specification Files (Bluefiles)	Y	KJ	See Below	15.07.16
13	Update Approved/Preliminary Dwg PDF Files	N			
14	Update Product Development Summary (STC applications)	Y	KJ		15.07.16
15	Update QSI 021 (TC/FAA STC) and/or STC Approval List	Y	KJ		15.07.16
16	Create/Update Parts / STC Database	Y	KJ		15.07.16
17	Update / Verify Airworthiness Release Certificate Database	N		# 131	
18	Create / Update Change Record Form / Item Card Database	N			
19	Create / Update Packaging Process Plan (PPP)	N			
20	Red Decals required on Packaging Process Plan (PPP)?	N			
21	Update Controlled Supplier Documents (Qpulse) Database	N			
22	Update Grey Project Binder / Electronic Project Folder	Y	KJ		15.07.16
23	Update D-Part / M-Drawing / DSI / DEO Master Binders	N			
24	Update "Royalty Paid to" attribute (Parts sold under Dart USA STC's)	N			
25					

Description / Action:

Please update paperwork in stock and in progress with this STC

134743 MF 15-7-17 main & offshore

ECN Verified & Complete: _____ Date: _____